



MULTIPLE INDICATOR CLUSTER SURVEY
NIGERIA, 2007



SUPERVISOR & EDITOR MANUAL
STATISTICS FIELD EXTENSION OFFICERS

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1.0 INTRODUCTION TO THE MICS 3 APPROACH

Field supervisors and editors for the Multiple Indicators EA Survey have an important position. They are the primary links between the director of field operations and the interviewers. As such, they are responsible for ensuring both the progress and quality of fieldwork.

These instructions provide the information needed by field supervisors and editors to carry out their duties. Candidates for the positions of field supervisor and editor for the MICS should study these instructions carefully during their training. They should also study the Instructions for Interviewers, since it is necessary to thoroughly understand the questionnaire and the procedures for completing it. Individuals selected to serve as field supervisors and editors should continue to refer to these instructions throughout the fieldwork period.

RESPONSIBILITIES OF THE FIELD SUPERVISOR

The field supervisor is the senior member of the field team. He/she is responsible for the well-being and safety of team members, as well as the completion of the assigned workload and the maintenance of data quality. The field supervisor receives his/her assignments from and reports to the fieldwork director.¹ The specific responsibilities of the field supervisor are to make the necessary preparations for the fieldwork, to organize and direct the fieldwork, and to spot check the data collected in the Household Questionnaire.

Preparing for fieldwork requires that the field supervisor:

- (1) Obtains sample household lists and/or maps for each area in which his/her team will be working and discuss any special problems.
- (2) Becomes familiar with the area where the team will be working and determine the best arrangements for travel and accommodations.
- (3) Contacts local authorities to inform them about the survey and to gain their support and cooperation.
- (4) Obtains all monetary advances, supplies and equipment necessary for the team to complete its assigned interviews. Careful preparation by the supervisor is important for facilitating the work of the team in the field, for maintaining interviewer morale and for ensuring contact with the central office throughout the fieldwork.

Organizing fieldwork requires that the field supervisor:

- (1) Assigns work to interviewers, taking into account the linguistic competence of individual interviewers, and assures that there is an equitable distribution of the workload
- (2) Maintains fieldwork control sheets, and makes sure that assignments are carried out
- (3) Makes spot checks of the Household Questionnaire by conducting household interviews according to the procedure described below
- (4) Regularly sends completed questionnaires and progress reports to the fieldwork director and keeps headquarters informed of the team's location

- (5) Communicates any problems to the fieldwork director
- (6) Takes charge of the team vehicle, ensuring that it is kept in good repair and that it is used only for project work.
- (7) Makes an effort to develop a positive team spirit. A congenial work atmosphere, along with careful planning of field activities, contributes to the overall quality of a survey.

RESPONSIBILITIES OF THE EDITOR

The specific duties of the editor are to monitor interviewer performance and to assist to make anthropometric measurements of children under 5 years of age. Close supervision of interviewers and editing of completed interviews is essential to assure that accurate and complete data are collected. Since the collection of high-quality data is crucial to the success of the survey, it is important that mature, responsible officers be recruited as editors and that they execute their duties with care and precision. This is especially important during the initial phases of fieldwork, when it is possible to eliminate interviewer error patterns before they become habit.

Monitoring interviewer performance requires that the editor:

- (1) Observes several interviews every day
- (2) Edits all completed questionnaires in the field. Editing must be completed prior to leaving the enumeration area. To the extent possible, the field supervisor should assist the editor in performing this task so that all interviews are field edited while still in the enumeration area
- (3) Conducts regular review sessions with interviewers and advises them of any problems found in their questionnaires
- (4) Puts completed questionnaires from an enumeration area in order and packs them up to be sent to the data processing centre.

Making anthropometric measurements of children is the responsibility of the team members and requires that they follow the procedures for weighing and measuring specified in the guidelines. Anthropometric measurements must be carried out by two persons who are trained to perform these tasks, among the team members

The two individuals assigned the responsibility of making anthropometric measurements can vary in different surveys. The exact procedure in a given survey will depend on the field conditions. The point is that team members should be trained on the role of measurer and the measurer must have completed the anthropometric training sessions.

1.1 PREPARING FOR FIELDWORK

COLLECTING MATERIALS FOR FIELDWORK

Before leaving for the field, the supervisor is responsible for collecting adequate supplies of the materials the team will need in the field. These items are listed below:

Fieldwork documents:

- Instruction manual for Supervisors and Editors
- Instructions manual for Interviewers
- Maps and Household Listing Forms for all EAs in the assigned enumeration area
- Letters of introduction
- Questionnaires
- Supervisor's Control Sheets
- Interviewer's Control Sheets.

Supplies:

- Blue pens for interviewers
- Red pens for the editor and supervisor
- Clipboards, briefcases
- Paper clips, scissors, string, staplers and staples, cello tape, etc.
- Envelopes to store completed questionnaires
- First aid kit.

Monetary Advances for Field Expenses

The supervisor should have sufficient funds to cover expenses for the team. Funds should be distributed according to the procedures established by the survey director, if these have not been included in the per diem that is given directly to the interviewers.

The supervisor should arrange for a system to maintain regular contact with the Headquarters staff before leaving for the field. Regular contact is needed for supervision of the team by central office staff, payment of team members and the return of completed questionnaires for timely data processing.

ARRANGING TRANSPORTATION AND ACCOMMODATIONS

It is the supervisor's responsibility to make all necessary travel arrangements for his/her team, whenever possible, in consultation with the Headquarters. The supervisor is responsible for the maintenance and security of the team vehicle. The vehicle should be used exclusively for survey-related travel, and when not in use, should be kept in a safe place. The driver of the vehicle takes instructions from the supervisor.

VEHICLES ARE GENERALLY PROVIDED TO TRANSPORT THE TEAM TO ASSIGNED WORK AREAS. HOWEVER, IN SOME CASES, IT MAY BE NECESSARY TO ARRANGE FOR OTHER MEANS OF TRANSPORTATION, SUCH AS BOATS, HORSES, MULES, ETC. CUSTOMIZE THE PARAGRAPH ABOVE ACCORDINGLY.

In addition to arranging transportation, the supervisor is in charge of arranging for food and lodging for the team. If they wish, interviewers may make their own arrangements, as long as these do not interfere with fieldwork activities. The lodging should be reasonably comfortable, located as close as possible to the interview area, and should provide a secure space to store survey materials. Since travel to rural areas is often long and difficult, the supervisor may have to arrange for the team to stay in a central location.

CONTACTING LOCAL AUTHORITIES

It is the supervisor's responsibility to contact the State, Local Government, local, and village officials head before starting work in an area. Letters of introduction will be provided, but tact and sensitivity in explaining the purpose of the survey will help win the cooperation needed to carry out the interviews.

USING MAPS TO LOCATE EAS

A major responsibility of the field supervisor and the editor is to assist interviewers in locating households in the enumeration areas. The fieldwork director will provide the supervisor with a copy of the Household Listing for the sample and/or maps of the EAs in which his/her team will be working. These documents will enable the team to identify the EAs boundaries and to locate the households selected for the sample. The representatives of the sample depend on finding and visiting every sampled household.

Maps are generally needed during all stages of a survey, since they provide a picture of the areas in which interviews are to be carried out and help to eliminate errors, such as duplication or omission of areas. Moreover, maps help the supervisor, editor and interviewers determine the location of sample areas, the distance to them, and how to reach selected households or dwellings.

Each team will be given general EA maps, Household Listing Forms and, for urban areas, sketch maps and written descriptions of the boundaries of selected areas. Enumeration area is the smallest working unit in any census or survey operation that can easily be covered by one enumerator. It has identifiable boundaries and lies wholly within an administrative or statistical area. The general EA maps may show more than one EA. Each EA is identified by a number (for example, EA-05). Symbols are used to indicate certain features on the map such as roads, footpaths, rivers, localities, boundaries, etc. If symbols are shown on the map, the supervisor and editor should know how to interpret them by using the legend.

In most EAs, the boundaries follow easily recognizable land features such as rivers, roads, railroads, swamps, etc. However, at times, boundaries are invisible lines. The location and determination of invisible boundaries calls for some ingenuity, particularly in rural areas. The following procedure is suggested:

In rural areas:

- (1) Identify on the map the road used to reach the EA. When you reach what appears to be the EA boundary, verify this by checking the location of actual

terrain features and landmarks against their location on the map. Do not depend on one single feature; rather, use as many as possible.

- (2) It is usually possible to locate unnamed roads or imaginary lines by asking people living in the vicinity. In most cases, these people will know where the villages are and, by locating the villages, you can usually determine where the boundaries run. Local authorities may be helpful, as well as residents.
- (3) While there are cases in which boundaries shown on the map no longer exist (for example, they have been demolished), or have changed location (for example, a road has been relocated or a river has changed course), do not be hasty in jumping to conclusions. If you cannot locate an EA, go on to the next one and discuss the matter later with the fieldwork director.

In urban areas:

- (1) As mentioned above, all urban EAs will have sketch maps and written descriptions to help you locate the boundaries. There should be no problem with invisible lines.
- (2) Street names in urban areas will often help you to locate the general area of EAs. Boundaries can be streets, alleys, streams, city limits, power cables, walls, rows of trees, etc.
- (3) Check the general shape of the EA. This will help you find out if you are in the right place.
- (4) Read the written description.
- (5) You should locate all the EA boundaries before you begin interviewing. For example, if the EA is a rectangular block, the names of three boundary streets is not enough to unequivocally identify the EA; check all four boundary streets.

FINDING SELECTED HOUSEHOLDS

In most cases, the selected households can be located by referring to the Household Listing Form or to the detailed maps of the selected EAs. Because people move around, and sometimes the listing teams may have made errors, you may have difficulty locating the residents of dwellings that were selected. Here are examples of some problems you may encounter and how to deal with them:

- (1) The household in the selected dwelling has moved away and the structure is vacant. If a household has moved out of the structure where it was listed and no one is living in the structure, you should consider the structure vacant and enter code '4' ('Household not found') on your Supervisor's Control Sheet.
- (2) The household in the selected dwelling has moved away and a new one is now living in the same structure. In this case, the new household should be interviewed.

- (3) The dwelling number and name of household head do not match what is found in the field. Say, for example, that Albert Jennies is listed as the household head for dwelling 003, but when the interviewer goes to 003 she finds that the household living there is headed by Mary Olson. Consider whichever household is living in 003 as the selected household (that is, the household headed by Mary Olson should be interviewed). Check carefully, however, that you are indeed in the right EA and have identified the selected dwelling.
- (4) The household listed in a selected dwelling is actually living in a dwelling that was not selected. If, for example, Albert Jennies is listed as the household head for dwelling 003, but Albert Jennies actually lives in 028, the household living in MICS-003 should be interviewed. In other words, if there is a discrepancy between the dwelling number and the name of the household head, interview whoever is living in the selected dwelling. Again, make absolutely sure that you are in the right EA and have identified the selected dwelling.
- (5) The listing shows only one household in the dwelling but two households are living there now. In this case, both households should be interviewed. Make a note on your Supervisor's Control Sheet next to the household that was not on the listing. Assign the new household a household number, enter the number on your Supervisor's Control Sheet, and instruct the interviewer to enter the new household number on the Interviewer's Control Sheet and on the questionnaire. However, if the listing already shows two households, only one of which was selected, and you find two or more households there now, only interview the one that had been selected and ignore the rest.
- (6) The head of the household has changed. In some cases, the person who is listed as the household head may have moved away or died since the listing. Interview the household head that is living there now.
- (7) The house is all closed up and the neighbours say the people are away and will be back in several days or weeks. Enter code '2' ('Not at home') on the Supervisor's Control Sheet.
- (8) The house is all closed up and the neighbours say that no one lives there; the household has moved away permanently. Enter code '6' ('Other') on the Supervisor's Control Sheet and specify the answer in the space provided.
- (9) A selected dwelling is actually a shop and no one lives there. Check very carefully to see if anyone is living there. If not, enter code '6' ('Other') on the Supervisor's Control Sheet and specify the answer in the space provided.
- (10) A selected structure is not found in the EA, and residents say that the dwelling was destroyed in a recent fire. Enter code '4' ('Dwelling destroyed') on the Supervisor's Control Sheet.

1.2 ORGANIZING AND SUPERVISING FIELDWORK

ASSIGNING WORK TO INTERVIEWERS

The following tips may be helpful to the supervisor in assigning work:

- (1) Make daily work assignments. Be sure each interviewer has enough work to do for the day, taking into account the duration of an interview and the working conditions in the area. The fieldwork director will advise you about how many interviews to assign per day.
- (2) It will be necessary to assign more interviews than an interviewer can actually do in one day because some households and/or women may not be available to interview at the time of the interviewer's visit. Sometimes there may be as many as three or four of these cases a day for a particular interviewer. In general, assign fewer households at the beginning of fieldwork to allow time for discussion of problems and for close supervision.
- (3) Distribute work fairly among the interviewers. Work should be assigned taking into account the capabilities and strengths of each interviewer, but never consistently assigning more difficult workloads to certain interviewers. If an interviewer is unlucky and consistently draws difficult assignments, the supervisor can purposely provide her some easier assignments.
- (4) Ensure that each interviewer has all the required information and materials for completing the work assignment.
- (5) Maintain complete records each day using the control sheets. All assignments and work completed by each interviewer and for each work area should be carefully monitored for completeness and accuracy.
- (6) Make sure that all selected households and eligible women and children for that EA have been interviewed before leaving an area. See below for details on how to handle pending interviews.
- (7) Finally, it is the responsibility of the supervisor to make sure that the interviewers fully understand the instructions given to them and that they adhere to the work schedule. The work schedule is prepared in advance by the Headquarters and adherence to it is crucial to avoid overruns in the total amount of time and money allocated for the fieldwork. Supervisors should also monitor the work of each interviewer to assess whether he/she is performing according to the standards set by the central office.

REDUCING NON-RESPONSE

One of the most serious problems in a sample survey of this type is non-response, that is, failure to obtain information for selected households or failure to interview eligible individuals (women or mothers/caretakers of children under five). A serious bias could result if the level of non-response is high. One of the most important duties of the supervisor and editor is to try to minimize this problem and to obtain the most complete

information possible. In many cases, interviewers will make return visits to households in the evening or on the weekends to reduce non-response. It is a time-consuming task and requires strict monitoring by means of the control sheets.

Non-response may be classified into three basic types:

Type 1: The interviewer is unable to locate the selected household.

Type 2: The interviewer is unable to locate the eligible woman or the mother/caretaker of children under five for whom information will be collected in the Household Questionnaire or individual interview.

Type 3: The respondent refuses to be interviewed.

Various ways of dealing with these types of non-response are discussed below.

Type 1: The interviewer is unable to locate the selected household.

- (a) *Occupied structure inaccessible.* There may be some occupied structures for which no interviews can be made because of impassable roads, etc. The interviewer should be instructed to hold the questionnaire until later. Another attempt should be made to reach the dwelling at a later date when the situation may have changed. The fieldwork director should be informed immediately of any difficulty in gaining access to a whole EA or a sizeable number of structures within the same EA.
- (b) *Structure not found.* The supervisor should make sure the interviewer has tried several times to locate the structure using the Household Listing Form, maps, etc. If the interviewer is still unsuccessful, the supervisor or editor should attempt to locate the structure and ask neighbours if they know anything about the structure or the household members. Again, if this problem occurs frequently, it should be reported to the fieldwork director. Although no interview has taken place, a Household Information Panel should be filled out in the Household Questionnaire.
- (c) *Structure non-residential, vacant or demolished.* If the interviewer indicates that a structure is not a dwelling unit or that it is vacant or demolished, the supervisor or editor should verify that this is the case. If the interviewer is correct, there is no need for further call-backs (return visits). Although no interview has taken place, a Household Information Panel should be filled out in the Household Questionnaire.

Type 2: The interviewer is unable to locate the eligible woman or the mother/caretaker of children under five for whom information will be collected in the Household Questionnaire or individual interview.

- (a) *No one at home at time of call.* The interviewer should make every effort to contact neighbours to find out when the members of the household will be at home or where they might be contacted. At least three visits should be made to locate the household members. Sometimes it may be necessary to call at

mealtimes, in the early morning, in the evening or on the weekend. However, the interviewer should not make 'hit or miss' calls just to fill the quota of three visits. It is not advisable to make all three visits on the same day, except in cases where it is known that the household will return during the same day.

- (b) *Respondent temporarily absent.* The respondent may not be at home or may be unable to complete the interview at the time of the first call. The interviewer should find out from other household members or neighbours when the respondent can best be contacted, and a return visit should be made then. If the respondent is still not at home at the time of the second visit, another time should be set for a return visit. At least three attempts should be made to locate the respondent. If the interviewer is not able to complete the entire interview during the initial visit, the procedure for call-backs should be followed.

Type 3: The respondent refuses to be interviewed.

The number of refusals reported by each interviewer should be closely monitored. If an interviewer reports an unusually high number of refusals, it may indicate that he/she gives up too easily or explains the survey inadequately. If this appears to be the case, the supervisor or editor should observe the interviewer promptly. Suggestions for handling potential refusals:

- (a) *Approach respondent from her point of view.* Refusals may stem from misconceptions about the survey or other prejudices. The interviewer must consider the respondent's point of view, adapt to it and reassure her. If there is a linguistic or ethnic barrier between the respondent and the interviewer, the supervisor should, if possible, send a different interviewer to complete the questionnaire.
- (b) *Postpone interview to another day.* If the interviewer senses that she has arrived at an inconvenient or awkward time, she should try to leave before the respondent gives a final 'no'; she can then return another day when circumstances are more likely to result in a successful interview.
- (c) *Have the editor carry out the interview.* The editor's knowledge, skill and maturity may enable her/him to complete a difficult interview when the assigned interviewer has been unable to do so.

HANDLING PENDING INTERVIEWS

When information has not been collected from a selected household or from an eligible respondent and the return visits have not been completed, the interview is considered 'pending'. All materials pertaining to this interview should remain with the interviewer until she has completed the pending interview. Supervisors and editors should keep track of all assignments on the Supervisor's Control Sheet.

Completing call-backs for pending interviews is time-consuming and should be carefully planned. If a few interviews remain pending as interviewing in a EA nears completion, one or two interviewers should be assigned to remain in the area and complete the interviews, while the rest of the team proceeds to the next assignment area. In this way,

the whole team is not kept waiting for one or two interviewers to finish. Clear instructions should be left with the interviewers as to where and when to rejoin the team and what method of transportation should be used.

MAINTAINING MOTIVATION AND MORALE

The supervisor and editor play a vital role in creating and maintaining motivation and morale among the interviewers, two elements that are essential to good-quality work. In order to achieve this, it is necessary to make sure that interviewers:

- Understand clearly what is expected of them
- Are properly guided and supervised in their work
- Receive recognition for good work
- Are stimulated to improve their work
- Work in tranquil and secure conditions.

In working with the interviewers, it may be useful to adhere to the following principles:

- (1) Rather than giving direct orders, try to gain voluntary compliance before demanding it.
- (2) Without losing a sense of authority, try to involve the interviewers in decision-making and, at the same time, see to it that the decision remains firm.
- (3) When pointing out an error, do it with tact, in a friendly manner and in private. Listen to the interviewer's explanation, show her that you are trying to help, and examine the causes of the problem together.
- (4) When interviewers voice complaints, listen with patience and try to resolve them.
- (5) Try to foster team spirit and group work.
- (6) Under no circumstances show preference for one or another of the interviewers.
- (7) Try to develop a friendly and informal atmosphere.

Finally, remember that encouraging words, instructions and constructive criticism are not worth anything unless the supervisor and editor set good examples. It is important to demonstrate punctuality, enthusiasm and dedication in order to demand the same of other team members. Never give the impression that you are working less than other members of the team, or that you are enjoying special privileges; this may produce a lack of faith in the project and cause general discontent. An ill-prepared supervisor or editor will not be able to demand quality work from interviewers and will lose credibility and authority. Interviewer morale and motivation depend on your morale and motivation.

2.0 The UNICEF Electronic Scale

The UNICEF Electronic Scale was designed to help health workers monitor the weight of children and pregnant women.

The scale makes weighing fast, easy and accurate. It can be used in two ways:

1. Pregnant mothers or older children can line up for weighing, stepping on the scale one after the other.
2. Babies and very small children can be weighed while being held in the arms of a mother or helper. This second method of weighing is called 'tared weighing'.

The scale is powered by long-lasting lithium batteries. The batteries should last for at least 1 million weighing cycles, or 400 weighings every day of the year (except weekends and holidays) for at least 10 years. The batteries and the electronic 'heart' of the scale are in a sealed unit to withstand damage from heat, humidity and dust. The solar cell is used only to turn the scale on and to tare the scale.

The scale switches off automatically if it is not used for 2 minutes. This helps preserve the life of the battery.

Preparing the UNICEF Electronic Scale for use:

1. Place the scale on a hard, level surface (wood, concrete or firm earth). Soft or uneven surfaces may cause small errors in weighing.
2. *The scale will not function correctly if it becomes too warm.* It is best to use the scale in the shade, or indoors. If the scale becomes hot and does not work correctly, place it in a cooler area and wait 15 minutes before using it again.
3. The scale must adjust to changes in temperature. If the scale is moved to a new site with a different temperature, wait for 15 minutes before using it again.
4. Handle the scale carefully:
 - Do not drop or bump the scale.
 - Do not weigh loads totaling more than 150 kilograms.
 - Protect the scale from excess moisture or humidity.
 - Do not use the scale at temperatures below 0° C or above 45° C.

Cleaning the scale


To clean the scale, wipe surfaces with a damp cloth. *Never put the scale into water.*

Storing the scale


Do not store the scale in direct sunlight or other hot places.

WEIGHING AN INFANT OR YOUNG CHILD HELD BY A HEALTH WORKER OR HELPER (TARED WEIGHING)

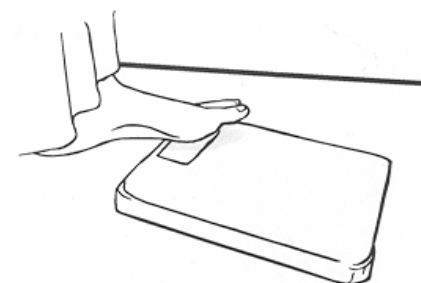
NOTE:

 is used to represent the mother and child image that appears on the left side of the display whenever the scale has been tared.

1. Turn the scale on by covering the solar cells for less than 1 second.

The display should show  188.8 first, then 0.0.

Wait until the display shows 0.0 before stepping on the scale.



Cover the solar cells for less than 1 second.



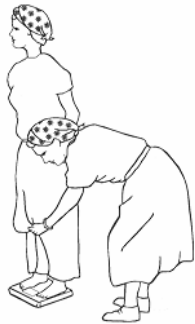
The scale is preparing itself for use.

The scale is ready for use.

2. Ask your helper to stand on the scale. Make sure the solar cells are not covered by a skirt or the person's feet. Your helper's weight will appear on the display within 2 seconds.

NOTE:

The person being weighed must stand still on the scale.



Your helper's weight appears on the display.

3. With your helper standing still on the scale, cover the solar cell for less than 1 second. The display will read 0.0. The small picture of the mother and baby means the scale is adjusting (taring) itself to ignore the helper's weight and preparing to weigh only the baby.



Cover the solar cells for less than 1 second to tare the helper's weight. Once tared, the display will show 0.0.

4. The helper can now get off the scale to get the baby. Alternatively, the mother can hand the baby to her.

If the helper gets off the scale to get the baby, the display will show ---.



IF THE HELPER GETS OFF THE SCALE, THE DISPLAY SHOWS THAT THE SCALE HAS BEEN TARED FOR THE HELPER'S WEIGHT.

5. After the helper steps back onto the scale and holds the baby, only the weight of the baby will be displayed. Record the baby's weight.

NOTE:


The scale will continue to show only the weight of the baby until the solar cell is covered or the helper returns the baby to its mother.



Now the helper can hold the baby and get back on the scale. Only the baby's weight will show on the display.

6. After the baby is given back to its mother, the display will again show 0.0 (as long as the helper remains standing on the scale). If the helper steps off the scale to get another baby, the display will show ---.







IF THE HELPER GIVES THE BABY TO SOMEONE ELSE TO HOLD, THE TARED SCALE WILL AGAIN DISPLAY  0.0.

7. Repeat steps 4 and 5 to weigh another baby.

REMEMBER: THE SCALE SWITCHES OFF AUTOMATICALLY 2 MINUTES AFTER THE LAST WEIGHING. IF THIS HAPPENS, FOLLOW THE INSTRUCTIONS TO TURN IT ON AGAIN.

Taring **weights:** **Important points**

- The weight of the person who will hold the child must be displayed (and then tared) before the child is given to her for weighing.
- The same person whose weight is tared must also hold the child.
- The weight of the child being weighed must be more than 2 kilograms if the helper stays on the scale to receive the child.
- If the helper gets off the scale to get a child while the display shows  0.0 (tared weighing mode), the next child can weigh less than 2 kilograms.
- The tare can be de-activated by quickly covering the solar cell or by waiting until the scale switches off automatically.

- The scale will always display  --- if the new load weighs less than the tared weight.
- If there is too much movement on the scale during measurement, the display will switch between  and  until the load becomes stable.

Possible reasons for the scale not taring weight:

- There was no weight on the scale to tare. Put some weight on the scale and try again.
- The solar cell was not covered completely.
- The solar cell was covered for more than 1 second. Try covering it for less than 1 second.
- It is too dark. Put the scale in a brighter place.
- The load weighs more than 120 kilograms. Use a lighter load.

WHAT TO DO IF THE SCALE DISPLAY SHOWS . . .

E01:

The scale has to adjust itself. Get off the scale and wait until E01 no longer appears.

E02

and switches off automatically:

Make sure there is no load on the scale and try to start the scale.

E03

and switches off automatically:

The scale is either too cold or too hot. Move it to a different place where the temperature is between 0° C and 45° C. Wait 15 minutes for it to adjust to the new temperature, then start the scale.

E04

after measuring:

The load is too heavy (more than 150 kilograms). Get off the scale and reduce the load.

E05

for a few seconds after trying to start the tare function:

The load is too heavy for taring (more than 120 kilograms). Get off the scale and reduce the load.

2.1 MEASURING PROCEDURES AND PRECAUTIONS

(1) PROCEDURES DIRECTED TO SPECIFIC INDIVIDUALS

THE PROCEDURES TO BE FOLLOWED IN MEASURING A CHILD ARE DIRECTED TO SPECIFIC INDIVIDUALS, THAT IS, THE MEASURER AND/OR THE ASSISTANT, INDICATED IN BOLD TYPE AT THE BEGINNING OF EACH STEP.

(2) TWO TRAINED PEOPLE REQUIRED

TWO TRAINED PEOPLE ARE REQUIRED TO MEASURE A CHILD'S HEIGHT AND LENGTH. THE MEASURER HOLDS THE CHILD AND TAKES THE MEASUREMENTS. THE ASSISTANT HELPS HOLD THE CHILD AND RECORDS THE MEASUREMENTS ON THE QUESTIONNAIRE. IF THERE IS AN UNTRAINED ASSISTANT, SUCH AS THE MOTHER, THEN THE TRAINED MEASURER SHOULD ALSO RECORD THE MEASUREMENTS ON THE QUESTIONNAIRE. ONE PERSON ALONE CAN TAKE THE WEIGHT OF A CHILD AND RECORD THE RESULTS IF AN ASSISTANT IS NOT AVAILABLE.

(3) PLACEMENT OF THE MEASURING BOARD AND SCALE

BEGIN TO OBSERVE POSSIBLE PLACES WHERE THE ELECTRONIC SCALE AND BOARD CAN BE POSITIONED AS SOON AS YOU WALK INTO A SAMPLE HOUSEHOLD. BE SELECTIVE ABOUT WHERE YOU PLACE THE MEASURING BOARD AND ELECTRONIC SCALE. DURING DAYLIGHT HOURS, IT IS BEST TO MEASURE OUTDOORS. IF IT IS COLD, RAINY OR IF TOO MANY PEOPLE CONGREGATE AND INTERFERE WITH THE MEASUREMENTS, IT MAY BE MORE COMFORTABLE TO WEIGH AND MEASURE A CHILD INDOORS. MAKE SURE THERE IS ADEQUATE LIGHT.

(4) ASSESSING THE AGE OF THE CHILD

BEFORE YOU MEASURE, DETERMINE THE CHILD'S AGE. IF THE CHILD IS LESS THAN 2 YEARS OLD, MEASURE LENGTH. IF THE CHILD IS 2 YEARS OF AGE OR OLDER, MEASURE HEIGHT. IF ACCURATE AGE IS NOT POSSIBLE TO OBTAIN, MEASURE LENGTH IF THE CHILD IS LESS THAN 85 CENTIMETRES. MEASURE HEIGHT IF THE CHILD IS EQUAL TO OR GREATER THAN 85 CENTIMETRES.

(5) WHEN TO WEIGH AND MEASURE

BEGIN WEIGHING AND MEASURING AFTER VERBAL INFORMATION HAS BEEN RECORDED ON THE QUESTIONNAIRE. THIS WILL ALLOW YOU TO BECOME FAMILIAR WITH THE MEMBERS OF THE HOUSEHOLD. DO NOT WEIGH AND MEASURE AT THE BEGINNING OF THE INTERVIEW, THAT IS, AS SOON AS YOU ENTER A HOUSEHOLD, SINCE THIS WOULD LIKELY BE PERCEIVED AS OVERLY INTRUSIVE.

(6) WEIGH AND MEASURE ONE CHILD AT A TIME

IN CASES WHEN THERE IS MORE THAN ONE ELIGIBLE CHILD OF THE SAME MOTHER/CARETAKER, COMPLETE ALL THE QUESTIONNAIRES FOR THE MOTHER/CARETAKER, AND THEN WEIGH AND MEASURE HER/HIS CHILDREN. IF THERE IS MORE THAN ONE ELIGIBLE CHILD AND MORE THAN ONE MOTHER/CARETAKER, YOU SHOULD BE CAREFUL ABOUT THE TIMING OF THE MEASUREMENTS, AND USE YOUR JUDGEMENT IN SUCH CASES. IF YOU THINK THAT LEAVING ALL OF THE MEASUREMENTS UNTIL AFTER THE COMPLETION OF ALL QUESTIONNAIRES WILL CAUSE CONFUSION AND ERRORS, THEN YOU MUST CARRY OUT MEASUREMENTS OF CHILDREN BY THE SAME MOTHER/CARETAKER ONCE THE QUESTIONNAIRES ADMINISTERED TO THAT MOTHER/CARETAKER HAVE BEEN COMPLETED, AND THEN MOVE ON TO THE NEXT MOTHER/CARETAKER. HOWEVER, IN REALITY, IT IS OFTEN THE CASE THAT INTERVIEWING ALL MOTHERS/CARETAKERS FIRST, AND MEASURING ALL CHILDREN AT THE END IS MORE PRACTICAL – USE THIS OPTION IF YOU ARE SURE THAT THIS WILL NOT CAUSE CONFUSION.

(7) CONTROL THE CHILD

WHEN YOU WEIGH AND MEASURE, YOU MUST CONTROL THE CHILD. THE STRENGTH AND MOBILITY OF EVEN VERY YOUNG CHILDREN SHOULD NOT BE UNDERESTIMATED. BE FIRM YET GENTLE. YOUR OWN SENSE OF CALM AND SELF-CONFIDENCE WILL BE FELT BY THE MOTHER AND THE CHILD.

WHEN A CHILD COMES INTO CONTACT WITH ANY MEASURING EQUIPMENT, THAT IS, A MEASURING BOARD OR ELECTRONIC SCALE, YOU MUST HOLD THE CHILD SO THAT HE OR SHE DOESN'T TRIP OR FALL. NEVER LEAVE A CHILD ALONE WITH A PIECE OF EQUIPMENT. ALWAYS MAINTAIN PHYSICAL CONTACT WITH THE CHILD, EXCEPT FOR THE FEW SECONDS WHILE TAKING HIS OR HER WEIGHT.

(8) COPING WITH STRESS

SINCE WEIGHING AND MEASURING REQUIRES TOUCHING AND HANDLING CHILDREN, NORMAL STRESS LEVELS FOR THIS TYPE OF SURVEY WORK ARE HIGHER THAN FOR SURVEYS WHERE ONLY VERBAL INFORMATION IS COLLECTED.

EXPLAIN THE WEIGHING AND MEASURING PROCEDURES TO THE MOTHER AND, TO A LIMITED EXTENT, THE CHILD, TO HELP MINIMIZE POSSIBLE RESISTANCE, FEAR OR DISCOMFORT. YOU MUST DETERMINE IF THE CHILD OR MOTHER IS UNDER SO MUCH STRESS THAT THE WEIGHING AND MEASURING MUST STOP. REMEMBER, YOUNG CHILDREN ARE OFTEN UNCOOPERATIVE; THEY TEND TO CRY, SCREAM, KICK AND SOMETIMES BITE. IF A CHILD IS UNDER SEVERE STRESS AND IS CRYING EXCESSIVELY, TRY TO CALM THE CHILD OR RETURN THE CHILD TO THE MOTHER FOR A MOMENT BEFORE PROCEEDING WITH THE WEIGHING AND MEASURING.

DO NOT WEIGH OR MEASURE A CHILD IF:

- *THE MOTHER REFUSES.*
- *THE CHILD IS TOO SICK OR TOO DISTRESSED.*
- *THE CHILD IS PHYSICALLY DEFORMED, WHICH WILL INTERFERE WITH OR GIVE AN INCORRECT MEASUREMENT. TO BE KIND, YOU MAY WANT TO MEASURE SUCH A CHILD AND MAKE NOTE OF THE DEFORMITY ON THE QUESTIONNAIRE.*

(9) RECORDING MEASUREMENTS AND BEING CAREFUL

RECORD THE MEASUREMENTS IN PEN. IF YOU MAKE AN ERROR, CANCEL IT AND REWRITE THE CORRECT NUMBERS. KEEP OBJECTS OUT OF YOUR HANDS AND PENS OUT OF YOUR MOUTH, HAIR OR BREAST POCKET WHEN YOU WEIGH AND MEASURE SO THAT NEITHER YOU NOR THE CHILD WILL GET HURT DUE TO CARELESSNESS. WHEN YOU ARE NOT USING A PEN, PLACE IT IN YOUR EQUIPMENT PACK, PEN CASE OR ON THE SURVEY FORM. MAKE SURE YOU DO NOT HAVE LONG FINGERNAILS. REMOVE RINGS AND WATCHES BEFORE YOU WEIGH AND MEASURE TO PREVENT THEM FROM GETTING IN THE WAY. DO NOT SMOKE WHEN YOU ARE IN A HOUSEHOLD OR WHEN YOU WEIGH AND MEASURE.

(10) STRIVE FOR IMPROVEMENT

YOU CAN BE AN EXPERT MEASURER IF YOU STRIVE FOR IMPROVEMENT AND FOLLOW EVERY STEP OF EVERY PROCEDURE THE SAME WAY EVERY TIME. THE QUALITY AND SPEED OF YOUR MEASUREMENTS WILL IMPROVE WITH PRACTICE. YOU MAY BE WORKING WITH A PARTNER TO FORM A TEAM. IF SO, YOU WILL BE RESPONSIBLE NOT ONLY FOR YOUR OWN WORK, BUT THAT OF YOUR TEAM.

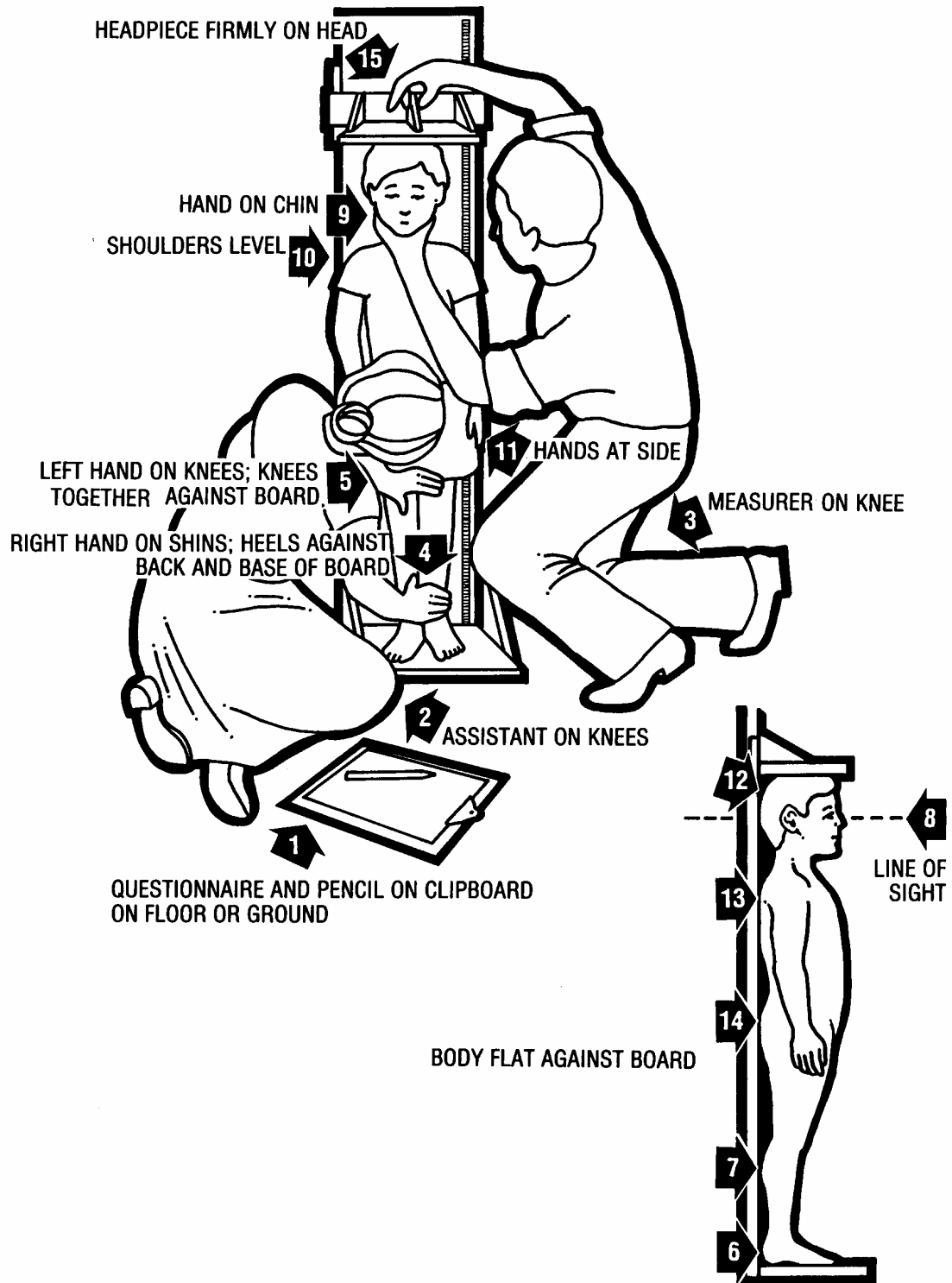
YOU WILL BE REQUIRED TO WEIGH AND MEASURE MANY CHILDREN. DO NOT TAKE THESE PROCEDURES FOR GRANTED, EVEN THOUGH THEY MAY SEEM SIMPLE AND REPETITIOUS. IT IS EASY TO MAKE ERRORS WHEN YOU ARE NOT CAREFUL. DO NOT OMIT ANY STEPS. CONCENTRATE ON WHAT YOU ARE DOING.

2.2 Nutritional Status Measurement Summary Procedures

Measuring a Child's Height: Summary of Procedures (see Illustration 1) 1

- (1) **MEASURER OR ASSISTANT:** PLACE THE MEASURING BOARD ON A HARD FLAT SURFACE AGAINST A WALL, TABLE, TREE, STAIRCASE, ETC. MAKE SURE THE BOARD IS STABLE.
 - (2) **MEASURER OR ASSISTANT:** ASK THE MOTHER TO REMOVE THE CHILD'S SHOES AND UNBRAID ANY HAIR THAT WOULD INTERFERE WITH THE HEIGHT MEASUREMENT. ASK HER TO WALK THE CHILD TO THE BOARD AND TO KNEEL IN FRONT OF THE CHILD (IF SHE IS NOT THE ASSISTANT).
 - (3) **ASSISTANT:** PLACE THE QUESTIONNAIRE AND PEN ON THE GROUND (ARROW 1). KNEEL WITH BOTH KNEES ON THE RIGHT SIDE OF THE CHILD (ARROW 2).
 - (4) **MEASURER:** KNEEL ON YOUR RIGHT KNEE ONLY, FOR MAXIMUM MOBILITY, ON THE CHILD'S LEFT SIDE (ARROW 3).
 - (5) **ASSISTANT:** PLACE THE CHILD'S FEET FLAT AND TOGETHER IN THE CENTRE OF AND AGAINST THE BACK AND BASE OF THE BOARD. PLACE YOUR RIGHT HAND JUST ABOVE THE CHILD'S ANKLES ON THE SHINS (ARROW 4), YOUR LEFT HAND ON THE CHILD'S KNEES (ARROW 5), AND PUSH AGAINST THE BOARD. MAKE SURE THE CHILD'S LEGS ARE STRAIGHT AND THE HEELS AND CALVES ARE AGAINST THE BOARD (ARROWS 6 AND 7). TELL THE MEASURER WHEN YOU HAVE COMPLETED POSITIONING THE FEET AND LEGS.
 - (6) **MEASURER:** TELL THE CHILD TO LOOK STRAIGHT AHEAD AT THE MOTHER IF SHE IS IN FRONT OF THE CHILD. MAKE SURE THE CHILD'S LINE OF SIGHT IS LEVEL WITH THE GROUND (ARROW 8). PLACE YOUR OPEN LEFT HAND ON THE CHILD'S CHIN. GRADUALLY CLOSE YOUR HAND (ARROW 9). DO NOT COVER THE CHILD'S MOUTH OR EARS. MAKE SURE THE SHOULDERS ARE LEVEL (ARROW 10), THE HANDS ARE AT THE CHILD'S SIDE (ARROW 11), AND THE HEAD, SHOULDER BLADES AND BUTTOCKS ARE AGAINST THE BOARD (ARROWS 12, 13 AND 14). WITH YOUR RIGHT HAND, LOWER THE HEADPIECE ON TOP OF THE CHILD'S HEAD. MAKE SURE YOU PUSH THROUGH THE CHILD'S HAIR (ARROW 15).
 - (7) **MEASURER AND ASSISTANT:** CHECK THE CHILD'S POSITION (ARROW 1-15). REPEAT ANY STEPS AS NECESSARY.
 - (8) **MEASURER:** WHEN THE CHILD'S POSITION IS CORRECT, READ AND CALL OUT THE MEASUREMENT TO THE NEAREST 0.1 CENTIMETRE. REMOVE THE HEADPIECE FROM THE CHILD'S HEAD, YOUR LEFT HAND FROM THE CHILD'S CHIN AND SUPPORT THE CHILD DURING THE RECORDING.
 - (9) **ASSISTANT:** IMMEDIATELY RECORD THE MEASUREMENT AND SHOW IT TO THE MEASURER.
NOTE: IF THE ASSISTANT IS UNTRAINED, THE MEASURER RECORDS THE HEIGHT.
 - (10) **MEASURER:** CHECK THE RECORDED MEASUREMENT ON THE QUESTIONNAIRE FOR ACCURACY AND LEGIBILITY. INSTRUCT THE ASSISTANT TO CANCEL AND CORRECT ANY ERRORS.
- ILLUSTRATION 1. MEASURING A CHILD'S HEIGHT

1 If the assistant is untrained (for example, the mother), then the measurer should help the assistant with the height procedure.

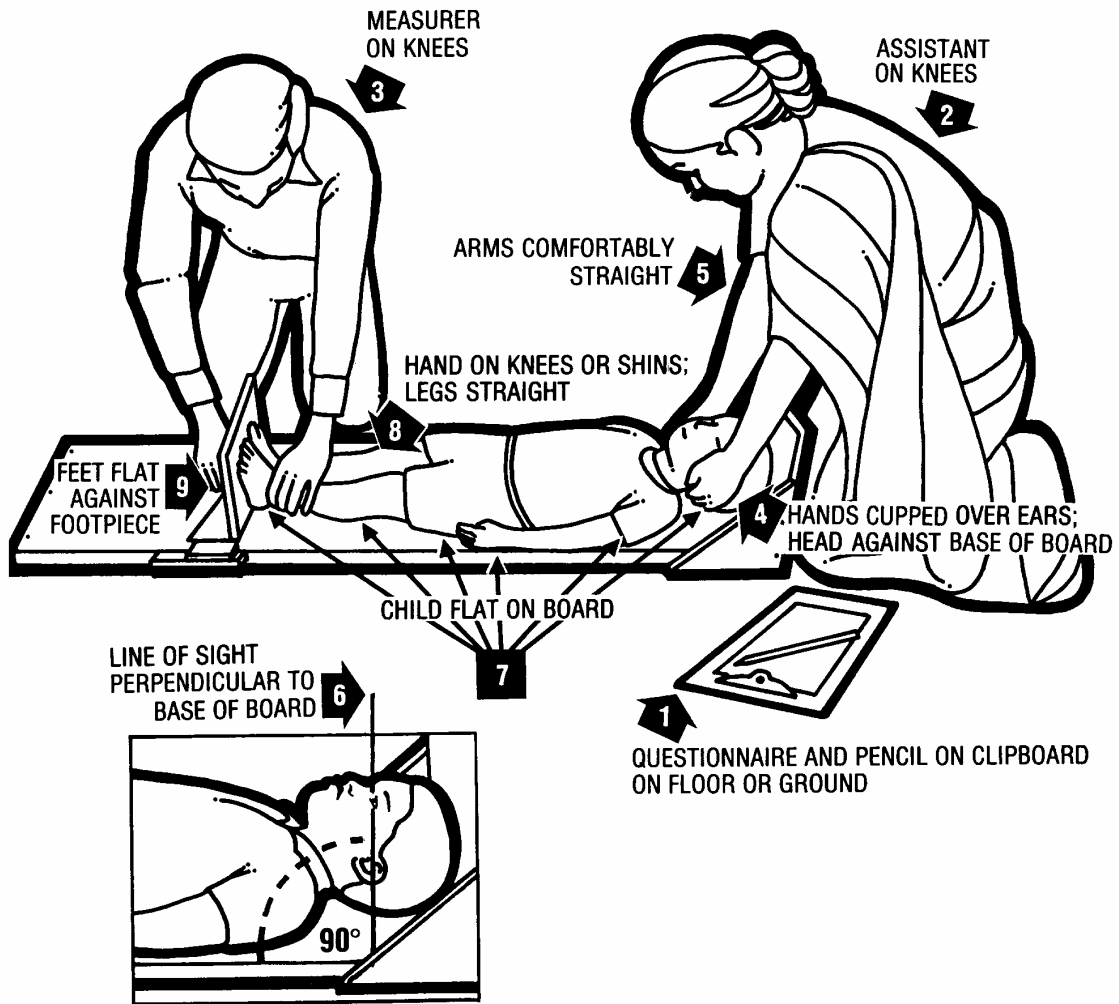


Measuring a Child's Length: Summary of Procedures (see Illustration 2)1

- (1) **MEASURER OR ASSISTANT:** PLACE THE MEASURING BOARD ON A HARD FLAT SURFACE, SUCH AS THE GROUND, FLOOR OR A STEADY TABLE.
- (2) **ASSISTANT:** PLACE THE QUESTIONNAIRE AND PENCIL ON THE GROUND, FLOOR OR TABLE (ARROW 1). KNEEL WITH BOTH KNEES BEHIND THE BASE OF THE BOARD, IF IT IS ON THE GROUND OR FLOOR (ARROW 2).
- (3) **MEASURER:** KNEEL ON THE RIGHT SIDE OF THE CHILD SO THAT YOU CAN HOLD THE FOOTPIECE WITH YOUR RIGHT HAND (ARROW 3).
- (4) **MEASURER AND ASSISTANT:** WITH THE MOTHER'S HELP, LAY THE CHILD ON THE BOARD BY DOING THE FOLLOWING:
ASSISTANT: SUPPORT THE BACK OF THE CHILD'S HEAD WITH YOUR HANDS AND GRADUALLY LOWER THE CHILD ONTO THE BOARD.
MEASURER: SUPPORT THE CHILD AT THE TRUNK OF THE BODY.
- (5) **MEASURER OR ASSISTANT:** IF SHE IS NOT THE ASSISTANT, ASK THE MOTHER TO KNEEL ON THE OPPOSITE SIDE OF THE BOARD FACING THE MEASURER TO HELP KEEP THE CHILD CALM.
- (6) **ASSISTANT:** CUP YOUR HANDS OVER THE CHILD'S EARS (ARROW 4). WITH YOUR ARMS COMFORTABLY STRAIGHT (ARROW 5), PLACE THE CHILD'S HEAD AGAINST THE BASE OF THE BOARD SO THAT THE CHILD IS LOOKING STRAIGHT UP. THE CHILD'S LINE OF SIGHT SHOULD BE PERPENDICULAR TO THE GROUND (ARROW 6). YOUR HEAD SHOULD BE STRAIGHT OVER THE CHILD'S HEAD. LOOK DIRECTLY INTO THE CHILD'S EYES.
- (7) **MEASURER:** MAKE SURE THE CHILD IS LYING FLAT AND IN THE CENTRE OF THE BOARD (ARROW 7). PLACE YOUR LEFT HAND ON THE CHILD'S SHINS (ABOVE THE ANKLES) OR ON THE KNEES (ARROW 8). PRESS THEM FIRMLY AGAINST THE BOARD. WITH YOUR RIGHT HAND, PLACE THE FOOTPIECE FIRMLY AGAINST THE CHILD'S HEELS (ARROW 9).
- (8) **MEASURER AND ASSISTANT:** CHECK THE CHILD'S POSITION (ARROWS 1-9). REPEAT ANY STEPS AS NECESSARY.
- (9) **MEASURER:** WHEN THE CHILD'S POSITION IS CORRECT, READ AND CALL OUT THE MEASUREMENT TO THE NEAREST 0.1 CENTIMETRE. REMOVE THE FOOTPIECE, RELEASE YOUR LEFT HAND FROM THE CHILD'S SHINS OR KNEES AND SUPPORT THE CHILD DURING THE RECORDING.
- (10) **ASSISTANT:** IMMEDIATELY RELEASE THE CHILD'S HEAD, RECORD THE MEASUREMENT AND SHOW IT TO THE MEASURER.
NOTE: IF THE ASSISTANT IS UNTRAINED, THE MEASURER RECORDS THE LENGTH ON THE QUESTIONNAIRE.
- (11) **MEASURER:** CHECK THE RECORDED MEASUREMENT ON THE QUESTIONNAIRE FOR ACCURACY AND LEGIBILITY. INSTRUCT THE ASSISTANT TO CANCEL AND CORRECT ANY ERRORS.

1 If the assistant is untrained (for example, the mother), then the measurer should help the assistant with the length procedure.

Illustration 2. measuring a child's length



3.0 MAINTAINING FIELDWORK CONTROL SHEETS

The work of interviewers is monitored and evaluated by keeping accurate record of assignments and the status of interviews. Both supervisors and interviewers have control forms to maintain. The Supervisor's Control Sheet contains information about the fieldwork in each EA. These forms should be returned to the fieldwork director along with the completed questionnaires from that EA. The interviewer will complete and return the Interviewer's Control Sheet to the supervisor at the end of work in each EA.

SUPERVISOR'S CONTROL SHEET

One Supervisor's Control Sheet should be completed for each EA by the supervisor and **returned to the office with the questionnaires from that EA.**

Assignment of Interviews

The first step in completing the Supervisor's Control Sheet is to record the information for selected households or dwellings from the Household Listing Forms or the maps provided, preferably in the same order in which they are indicated on these forms.

Generally, the supervisor will need two to four Supervisors' Control Sheets to list all of the selected households in an EA. The EA identification information should be filled in on all of the sheets, and they should be numbered sequentially in the space provided at the top of the sheet (for example, 1 of 5, 2 of 5, etc.). If an additional sheet is needed during the recording of the outcomes of the household and/or individual interviews in an EA, the supervisor should be sure to staple that sheet to the others for the EA and correct the total number of sheets reported for the EA.

The director of field operations will provide the supervisor with the appropriate forms or maps for each EA assigned to that team. Using the guidelines presented before, the supervisor should assign each interviewer a certain group of households or dwellings to interview. The interviewer is then responsible for completing three tasks:

- (1) Interviewing all the households
- (2) Determining the number of eligible women and children under five in each of the households
- (3) Interviewing all eligible women and mothers/caretakers of children under five of the households or dwellings assigned to her.

As soon as the assignments have been made, the supervisor should complete columns 1 through 3 of the Supervisor's Control Sheet with the relevant information. The interviewer should complete columns 1 and 2 of the Interviewer's EA Control Sheet.

In filling out the top of the Supervisor's Control Sheet, copy the information such as EA number, name of the EA and state from the Household Listing Form or map. The EA number will typically be a three-digit number and will be written on the top of each page of the Household Listing. EA numbers are unique: No two EAs should have the same number.

Household Visits and Individual Interviews: Columns 4–8

During the day, the interviewers will return the completed questionnaires to the editor or supervisor, who will check them. As the questionnaires are received, the information on the cover sheets can be used to complete columns 4 through 8 of the Supervisor’s Control Sheet. The following procedure is suggested:

First, review the household and individual questionnaires, checking to see that:

- (1) Eligible women and children under five have been correctly identified on the Household Questionnaire
- (2) Individual questionnaires were assigned to each of the eligible women and children under five years of age, even if the actual interview was not completed
- (3) The identification information on the cover pages of all the household and individual questionnaires for women and children is correct.

Second, using the questionnaires, copy information about the results of the interview into columns 4 through 8 of the Supervisor’s Control Sheet. In column 5, write the number of eligible women 15 to 49 years identified on the cover page of the Household Questionnaire (HH12), and in column 6 the number of eligible children under 5 years of age identified in HH14. The final result of the household interview should be written in column 4 and the number of eligible respondents (ER) with complete interviews in column 7 for women and in column 8 for children under five.

Remarks: Column 9

Remarks and comments regarding the interview assignment, results or interviews may be recorded here; for example, reassignment of a pending interview or a change in the name of a household head, etc. Also, note here any irregularities observed during spot checks or re-interviews.

Check to be sure that you have listed all the households or dwellings on the Supervisor’s Control Sheet that were selected on the Household Listing Form or map for that EA. **There can never be fewer Household Questionnaires than selected households or dwellings**, but there can be more.

Always start a new EA on a separate Supervisor’s Control Sheet. Be sure to write neatly, since these forms will be used to make response rate calculations later on in the central office.

INTERVIEWER’S EA CONTROL SHEET

The Interviewer’s EA Control Sheet (see Annex A4.3) is similar to the Supervisor’s Control Sheet, and helps each interviewer keep track of the households assigned to her. The supervisor and editor should review the Interviewer’s EA Control Sheets each evening and discuss the results of the interviews.

3.1 SYSTEMATIC SPOT CHECKING OF HOUSEHOLD COMPOSITION

As noted earlier, the most important function of field supervisors is to control the quality of the data collection. A problem that arises frequently is that some interviewers may deliberately subtract years from the age of women who are 15 to 19, add years to women who are over 40, or add years to children under 5 in order to place them outside the age range of eligibility for the individual questionnaires. Sometimes interviewers may simply omit eligible women or children from the listing. In these ways they reduce their workload. If such practices are widespread, they can have a substantial impact on the quality of the survey data.

A powerful tool for detecting and preventing this kind of interviewer error is to systematically spot check household composition. This will involve returning to certain households with a blank Household Questionnaire and filling in columns 2 to 8 for each person, that is, name, relationship to the head of the household, sex, age and eligibility. You should carefully probe the ages of girls declared to be 11 to 14 years of age, of women 50 to 55 years of age, and of children 5 to 9 years of age. The spot check should, if possible, be made the same day as the interviewer's visit so that the same respondent(s) can be found.

The field supervisor will be responsible for conducting two spot checks of household composition in each sample EA. He/she may ask the editor to do spot checks, wherever appropriate and necessary. The selection of households to be checked should not be random. Rather, you should select households that contain women or children of borderline ages, that is, 11 to 14, 50 to 55 and 5 to 9. Furthermore, you should make sure that all of the team's interviewers are occasionally spot checked.

After you have selected the households for the spot check, you will fill out the identification information on the cover sheets of blank Household Questionnaires with a red pen. At the top of the cover page write clearly 'SPOT CHECK'. You will then visit the selected households with only the spot-check questionnaire. After completing columns 2 through 8 of the Household Listing for each household member and visitor, obtain the Household Questionnaire completed by the interviewer and compare your listing with that of the interviewer. Write the results of this comparison with a red pen in any available space on the spot-check questionnaire (for example, in the unfilled space in columns 9 through 12 of the Household Listing or at the bottom of the page). There are a variety of possible results: identical listings; additional persons; fewer persons; a child under 5 years of age who, in the original interview, was listed as older; and most important, detection of an (additional) eligible respondent not identified in the original interview.

If you discover a woman eligible for the individual interview who was not identified in the original interview, you must call the error to the interviewer's attention and send her back to interview the woman. If you discover a child for which a questionnaire should have been completed but was not, send the interviewer back to gather the missing information.

The questionnaires resulting from the spot check should be included with the other materials sent back to the Headquarters when fieldwork in the EA is completed.

3.2 MONITORING INTERVIEWER PERFORMANCE

Controlling the quality of the data collection is the most important function of the editor. Throughout the fieldwork, he/she will be responsible for observing interviews and carrying out field editing. By checking the interviewers' work regularly, the editor can ensure that the quality of the data collection remains high throughout the survey. It may be necessary to observe the interviewers more frequently at the beginning of the survey and again toward the end. In the beginning, the interviewers may make errors due to lack of experience or lack of familiarity with the questionnaire; these can be corrected with additional training as the survey progresses. Toward the end of the survey, interviewers may become bored or lazy in anticipation of the end of the fieldwork; lack of attention to detail may result in carelessness with the data. To maintain the quality of data, the editor should check the performance of interviewers thoroughly at these times.

OBSERVING INTERVIEWS

The purpose of the observation is to evaluate and improve interviewer performance and to look for errors and misconceptions that cannot be detected through editing. It is common for a completed questionnaire to be technically free of errors, but for the interviewer to have asked a number of questions inaccurately. Even if the editor does not know the language in which the interview is being conducted, he/she can detect a great deal from watching how the interviewer conducts herself, how she treats the respondent and how she fills out the questionnaire. The editor should observe each interviewer many times throughout the course of the fieldwork. The first observation should take place during interviewer training and may also be used as a screening device in the selection of interviewer candidates. Each interviewer should also be observed during the first two days of the fieldwork so that any errors made consistently are caught immediately. Additional observations of each interviewer's performance should be made during the rest of the fieldwork. The editor should observe at least one interview per day during the course of the fieldwork, with the heaviest observation at the beginning and end.

During the interview, the editor should sit close enough to see what the interviewer is writing. This way, she can see if the interviewer interprets the respondent correctly and follows the proper skip patterns. It is important to make notes of problem areas and points to be discussed later with the interviewer. The editor should not intervene during the course of the interview and should try to conduct herself in a manner that does not make the interviewer or respondent nervous or uneasy. Only in cases where serious mistakes are being committed by the interviewer should the editor intervene.

After each observation, the editor and interviewer should discuss the interviewer's performance. The questionnaire should be reviewed, and the editor should mention the interviewer's strong points as well as problems and mistakes.

EVALUATING INTERVIEWER PERFORMANCE

The editor should meet daily with the interviewers to discuss the quality of their work. In most cases, mistakes can be corrected and interviewing style improved by pointing out and discussing errors at regular meetings. At team meetings, the editor should point out mistakes discovered during observation of interviews or noticed during questionnaire editing. Discuss examples of actual mistakes, but be careful not to embarrass individual interviewers. Reread relevant sections from the Instructions for Interviewers with the team to resolve problems. Also, encourage the interviewers to talk about any situations they encountered in the field that were not covered in training. The group should discuss whether or not the situation was handled properly and how similar situations should be handled in the future. Team members can learn a lot from one another in these meetings and should feel free to discuss their own mistakes without fear of embarrassment.

The editor and supervisor should expect to spend considerable time evaluating and instructing interviewers at the start of the fieldwork. If they feel that the quality of work is not adequate, the interviewing should stop until errors and problems have been fully resolved. In some cases, an interviewer may fail to improve and will have to be replaced. This applies particularly in the case of interviewers who have been dishonest in the recording of ages of women and/or children.

3.3 EDITING QUESTIONNAIRES

Ensuring that questionnaires are edited for completeness, legibility and consistency is one of the most important tasks of the editor. **The survey requires that every questionnaire be thoroughly checked in the field.** This is necessary because even a small error can create much bigger problems after the information has been entered into the computer and tabulations have been run. Timely editing permits correction of questionnaires in the field.

GENERAL INSTRUCTIONS

- (1) As you go through the questionnaires, mark any problem areas with a red pen and note the page number or the question number on the back page; then, the interviewer can quickly see whether there are any observations. Upon completion of editing, discuss with each interviewer, individually, the problems encountered and review errors that occur frequently with the whole team.
- (2) If the problems are major, it will be necessary to go back to interview the respondent again. If a return visit is not possible, try to establish with the interviewer's assistance the correct response from other information in the questionnaire. If, and only if, this is not possible, take the following action:
 - (a) If the response is missing (that is, there is no answer recorded because the question was not asked), enter a code of '9' ('99', '999') and circle that code with a red pen.
 - (b) If the response is inconsistent with other information in the questionnaire and you cannot determine the correct response, enter a code '7' ('97', '997') and circle that code with a red pen.

NOTE: UNDER NO CIRCUMSTANCES SHOULD YOU MAKE UP AN ANSWER.

- (3) In checking through each questionnaire, be sure that the numbers entered in boxes are legible and that the circles used by the interviewer to select the pre-coded numbers clearly mark only one of the choices (except in cases where more than one code is allowed). Also make sure that when the 'Other' category is selected, the answer is clearly specified in the area provided.
- (4) In checking each questionnaire, make certain that the respondent was asked all questions appropriate for her (for example, that the interviewer followed the skip instructions). You will need to look for:
 - (a) Questions for which there is a response when it appears there should be no response
 - (b) Questions for which there is no response when it appears there should be a response.

Mark these skip errors with a red pen and try to determine the correct response as described in paragraph (2) above. Correct errors following the system described in the Instructions for Interviewers, for example, drawing two lines through the existing code and circling or writing the new code. **ALWAYS USE A RED PEN IN MAKING CORRECTIONS.**

- (5) Check the ranges for all variables that are not pre-coded (for example, a 34-year-old woman cannot have 24 sons living with her) and carry out the other consistency checks that are listed. Mark any inconsistencies with a red pen and try to determine the correct responses as described in paragraph (2) above.
- (6) The editor should advise the team supervisor about questionnaires that have been returned to interviewers for further work.

EDITING THE HOUSEHOLD QUESTIONNAIRE

In editing the Household Questionnaire, be sure to:

- (1) Check, in the Household Information Panel, that the household identification information has been completed correctly.
- (2) Code the information on the Information Panel if the interviewer has not done so. If the final result code is not '1', check to see that the remaining pages are blank. If the final result code is '1', continue to check the following pages of the Household Questionnaire.
- (3) Check for complete information for each line number in columns HL3, HL4 and HL5 of the Household Listing Form. There should be no blanks in these columns.

- (4) Also in the Household Listing Form, check that the line numbers of all women ages 15 to 49 have been circled in column HL6, and that in columns HL7 and HL8 the line number of the mother/caretaker of children five to 14 and children under 5 years of age, respectively, were inserted. If you find errors regarding eligible women or children in the household, check with the interviewer to make certain the correct number of interviews have been conducted in the household.
- (5) Check that there is information in columns HL9 through HL12 for each person under 18 years of age included in the Household Listing Form.
- (6) If the response in column HL9 of the Household Listing Form is 'No' or 'DK', then column HL10 should be blank. If the response in column HL9 is 'Yes', then there must be information in column HL10. Likewise, if the response in column HL11 is 'No' or 'DK', then column HL12 should be blank. If the response in column HL11 is 'Yes', then there must be information in column HL12.
- (7) In the Education module, check that the questions of columns ED2 and ED3 have been filled for each person aged five and older. Column ED3 must be blank if the household member is less than 5 years of age or if the answer in column ED2 is 'No'.
- (8) Also in the Education module and for persons 5 to 24 years of age, check that questions ED4 to ED8 are completed following the appropriate skips. For example, if ED4 = 2, then ED5 AND ED6 must be blank. Similarly, if ED7 = 2 or 8, then ED8 must be blank.
- (9) In the Water and Sanitation module, check that there are answers for questions WS1 through WS9 when appropriate for each household in the sample. Notice that depending on the skip patterns for each question, some questions should be blank (for example, if WS1 = 11 or 12, then WS2, WS3 and WS4 must be blank). Also make sure that when the 'Other' category is selected, the answer is clearly specified in the area provided.
- (10) In the Child Labour module, check that answers to questions CL2 through CL9 are asked for all household members aged 5 to 17 years. Check that the appropriate skips were followed and that an answer exists when applicable. For example, column CL9 must indicate a number of hours only if the answer in column CL8 is 'Yes'.
- (11) In the Salt Iodization module, verify that the salt test was implemented in each household and that the result is recorded in the questionnaire.
- (12) Check that the number of Questionnaires for Individual Women and for Children Under Five returned with each Household Questionnaire is the same as the number of eligible women and children under five reported on the cover page. Speak with the interviewer when there is any inconsistency.

EDITING THE QUESTIONNAIRE FOR INDIVIDUAL WOMEN

- (1) Check that the identification information for the Questionnaire for Individual Women has been completed correctly. Information for EA and household number must be the same as that on the Household Information Panel of the Household Questionnaire. The line number of the woman should be consistent with her line number in the Household Listing in the Household Questionnaire.
- (2) Code the information on the Questionnaire for Individual Women if the interviewer has not done so. If the questionnaire is incomplete, verify the reason for the result. If the interview is completed, continue to check the remaining pages of the questionnaire.
- (3) In the Women's Information Panel, check the answer to WM10 (Date of birth). The month of birth should be between '01' and '12', or '98'; the year of birth should be not less than '1957/58' and not greater than '1991/92', or '9998'; and WM11 (Age) should be between '15' and '49'. Question WM11 must have an answer, even if it is the interviewer's best estimate. It can never be left blank. Also check that, when provided, the date of birth and age are consistent. If these responses are inconsistent, discuss the problem with the interviewer.

If at all possible, an effort should be made to revisit the respondent to resolve the inconsistency since age is one of the most important pieces of information collected in the questionnaire. If a revisit cannot be scheduled, it may be necessary to look at other information in the household and individual questionnaires in an effort to resolve the inconsistency. Items that should be considered include:

- Age recorded for respondent in Household Questionnaire
- Number of live births
- Date of birth of respondent's first child.

If the respondent's age is either less than '15' or more than '49', write 'NOT ELIGIBLE' on the cover of the Questionnaire for Individual Women. This questionnaire should not be processed. Also check, and correct if necessary, the eligibility status of this woman in the Household Questionnaire. Remember that corrections to the Household Questionnaire can only be made on the basis of information in individuals questionnaires if the information collected changes the eligibility status.

- (4) In the Child Mortality module, check that CM9 is equal to the sum of the six values in CM4, CM6 and CM8. CM9 must have a code filled in. If the respondent has never had any births, the interviewer should have recorded '2' in CM1 and left the rest of the questions blank.
- (5) Also in the Child Mortality module, for CM11, make sure that the date of the last birth is completed in DAYS, MONTHS, and YEARS and not, for example, in DAYS and MONTHS only. Since this date is used to decide the applicability of the

Tetanus Toxoid and the Maternal and Newborn Health modules, information must exist at least for month and year of birth of the last child. If you find this information missing, the interviewer should be sent back to the household to determine the missing information. We need to know whether the baby was born during the 2-year period before the survey.

- (6) In this same module, for CM2A and CM2B for the first birth, use the respondent's age (WM10 and WM11 in the Women's Information Panel) and the age of her first-born child to check that she was at least 12 years of age at her first birth. Inconsistencies between the age of the respondent and the date of the first birth generally arise from the following circumstances:
- (a) The child is not the respondent's own (biological) child
 - (b) The respondent's birth date/age (WM10 and/or WM11) are incorrect
 - (c) The birth date or age of the first child (CM2A and/or CM2B) is incorrect.

A call-back should be made, if at all possible, to determine the source of error.

- (7) Check the information in CM11 of the Child Mortality module to make certain there is a child born during the 2 years before the survey (even if the child has since died), in which case the child must be properly identified in CM12. If the respondent has had no births during the 2 years before the survey, the Tetanus Toxoid and the Maternal and Newborn Health modules must be blank.
- (8) In the Tetanus Toxoid module, verify that the answer to TT3 is properly used in the filter before TT5. If the response to TT3 is 2 or greater, then TT5 through TT8 must be blank. Likewise, if the answer to TT3 is less than 2, then TT5 through TT8 must have information. If TT6 applies, verify that either TT7 or TT8 must have information.
- (9) In the Maternal and Newborn Health module, if other answers are provided for MN2 and MN7, verify that answers were clearly specified. Also for MN11, check that the appropriate code was circled before the weight of the child in kilograms.
- (10) In the Contraceptive Use module, make sure that CP1 is completed and that the skip instruction was used. If the woman is currently pregnant (CP = 1), CP2 and CP3 must be blank. CP3 must also be blank when the woman indicated no use of contraception (CP2 = 2). If the answer to CP3 is 'Other', verify that the method is clearly specified in the space provided.

EDITING THE QUESTIONNAIRE FOR CHILDREN UNDER FIVE

- (1) Check that the identification information for the Questionnaire for Children Under Five has been completed correctly. Information for EA and household number must be the same as that on the Household Information Panel of the Household Questionnaire and the Questionnaire for Individual Women. Verify that the 'Child's name' and the 'Child's line number' (UF5 and UF6 in the Under-five Child Information Panel) are the same as reported in the Household Listing Form.
- (2) In the Under-five Child Information Panel, check for consistency between UF12 (Date of birth) and UF13 (Age). Note that 'DK' is only allowed for day of birth in UF12. If the age calculated from the date of birth is different from the age in UF13, and BR1 = 1 (Birth certificate seen), then correct UF13, otherwise check with the interviewer and, if necessary, send her back to the household for correction.
- (3) If the response for VA3 in the Vitamin A module is 'Other', verify that the response is clearly specified in the space provided.
- (4) In the Breastfeeding module, check that, when applicable, BF3A through BF3I have answers.
- (5) When reviewing the Care of Illness module, special attention must be paid to the answers provided to CA2A through CA2C. If CA7, CA9, CA11, CA13, and/or CA14 have 'Other' as a response, verify that these are clearly specified in the spaces provided.
- (6) For each child with an immunization record that was seen by the interviewer ('Yes' in IM1 in the Immunization module), check that the date of each vaccination is consistent with the child's date of birth. For example, it cannot be prior to the date of birth. Check also that the dates for the three polio and the three DPT vaccinations are in chronological order.
- (7) In the Anthropometry module, the measures of the children should lie within the ranges specified in Annex A4.1. If a measure falls outside the acceptable range, the measurer should revisit the household, re-measure the child, and check that the child's age has been correctly recorded. If AN4 = 6, that is, an 'Other' response was identified as a result for the measurement, verify that this is clearly specified in the space provided.

3.4 ORGANIZING QUESTIONNAIRES FOR RETURN TO THE DATA PROCESSING CENTRE

- (1) Put all the Questionnaires for Individual Women and for Children Under Five inside their respective Household Questionnaires. If there is more than one individual questionnaire in a household, organize them sequentially in ascending order of the line numbers of the respondents.
- (2) Organize all questionnaires in numerical order by household number within the EA. Also, any continuation questionnaires (for example, if there are more than 15 people in a household) should be inside the primary questionnaire and should have 'CONTINUATION' written across the top of the cover sheet. The primary questionnaire for that set should say 'SEE CONTINUATION' across the top of the cover sheet. The continuation questionnaire should have all identification information written on it on the cover page.
- (3) Check the questionnaires in the EA against the Supervisor's Control Sheet to make certain that:
 - (a) The correct number of Household Questionnaires are present
 - (b) The household final result codes are correct
 - (c) The correct number of individual questionnaires are present.

Remember, there must be a questionnaire assigned for each eligible woman and each child under five, except when the interview has not been conducted yet. The number of cases in which an individual questionnaire was not assigned (for women and children under five) needs to be closely monitored to avoid high non-response percentages. As a reference, the total response rates for individual questionnaires, estimated as the product of the Household Questionnaire response rate times the individual questionnaire response rate for women and children, respectively, should not be below 90 per cent.

FORWARDING QUESTIONNAIRES TO THE HEAD OFFICE

Once all the checking described above has been completed, and any differences have been reconciled, the questionnaires are ready to be sent to the Headquarters. The director of field operations will provide specific instructions about how and when to send the questionnaires from each EA. It is very important that questionnaires are bundled and labelled properly, and protected from dampness and dust. Follow these instructions to the letter to avoid the loss of questionnaires or information.

Annex A4.1

3.5 LIMITS FOR LENGTH AND WEIGHT OF CHILDREN

In editing the length and weight of children to ensure that no data entry errors are made, the following values are used as the minimum and maximum expected values. The ranges are dependent on the sex and age of the child and are given in centimetres for the length (height) of the child and kilograms for the weight of the child.

Age in Months	LENGTH/HEIGHT (cm)				WEIGHT (kg)			
	Males		Females		Males		Females	
	Minimum	Maximum	Minimum	Maximum	Minimum	Maximum	Minimum	Maximum
0-2	36.0	74.0	36.0	72.0	0.5	10.0	0.5	9.0
3-5	45.0	83.0	44.0	80.0	1.0	13.0	1.0	12.0
6-8	51.0	87.0	50.0	86.0	2.0	15.0	2.0	14.0
9-11	56.0	91.0	54.0	90.0	3.0	16.5	2.5	15.5
12-14	59.0	96.0	57.0	95.0	4.0	17.5	3.0	16.5
15-17	62.0	100.0	60.0	99.0	4.0	18.5	3.5	17.5
18-20	64.0	104.0	62.0	102.0	4.0	19.5	3.5	18.5
21-23	65.0	107.0	64.0	106.0	4.5	20.5	4.0	19.5
24-26	67.0	108.0	66.0	107.0	4.5	23.0	4.5	21.5
27-29	68.0	112.0	68.0	111.0	5.0	24.0	5.0	23.0
30-32	70.0	115.0	69.0	114.0	5.0	24.5	5.0	24.5
33-35	71.0	118.0	71.0	117.0	5.0	25.5	5.0	25.5
36-38	73.0	121.0	72.0	120.0	5.0	26.0	5.0	27.0
39-41	74.0	124.0	74.0	122.0	5.0	27.0	5.0	28.0
42-44	75.0	127.0	75.0	124.0	5.0	28.0	5.5	29.0
45-47	77.0	129.9	77.0	126.0	5.0	29.0	5.5	30.0
48-50	78.0	132.0	78.0	129.0	5.0	30.0	5.5	31.0
51-53	79.0	134.0	79.0	131.0	5.0	31.0	5.5	32.0
54-56	80.0	136.0	81.0	133.0	5.5	32.0	6.0	33.0
57-59	82.0	139.0	81.0	136.0	5.5	33.0	6.0	34.5

Annex A4.2

3.6 MICS3 SUPERVISOR'S/EDITOR'S CONTROL SHEET

EA number: _____

Supervisor number: _____

Date: _____

HH No. (1)	Name of head of household (2)	Interviewer and date assigned (3)	Final result (4)	Number of Eligible		Interviews Completed		Notes (9)
				Women (5)	Children (6)	Women (7)	Children (8)	
TOTAL:								

Annex A4.3

Interviewer's EA Control Sheet

EA number: _____

Interviewer number: _____

Date: _____

HH No. (1)	Name of head of household (2)	Final result (3)	Number of Eligible		Interviews completed		Notes (8)
			Women (4)	Children (5)	Women (6)	Children (7)	
TOTAL:							

